D-Link
Building Networks for People

Product Highlights

Modular Architecture

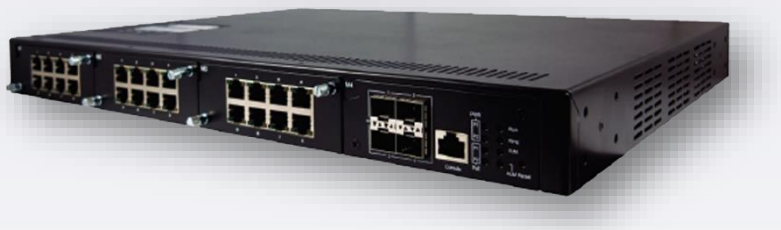
The modular architecture of the switch allows versatile port options of Gigabit copper, PoE & Non PoE, Giga SFP & up to 4 10G SFP+ or 1G SFP interface in a single switch.

Robust Design

High EMC endurance, fanless design, and wider operating temperature range combined with IP30 housing to withstand harsh operating environments.

Automation and IIoT ready

PROFINET certified and Ethernet/IP ready switch, perfect for being the backbone of Industrial automation network.



DGS-F3400 Series

Layer 2 Gigabit Modular Industrial Switch

Features

Robust Design

- IP30-rated metal housing
- Fanless, passive cooling design
- High EMC endurance

Network Redundancy

- Ethernet Ring Protection Switching (ERPS)
- Dual power input for redundant power supplies

Switching Features

- IEEE 802.1Q and port-based VLAN
- IEEE 802.1p Quality of Service (QoS)
- STP/RSTP/MSTP
- Port mirroring
- IEEE 802.3ad Link aggregation
- Bandwidth control
- Broadcast storm control

Advanced Features

- IGMP/MLD Snooping
- L2 / L3 ACL

The DGS-F3400 Series Layer 2 Modular Gigabit Industrial Managed Switches are equipped with 4 10G SFP+ or 1G SFP Ports & 3 open slots for 8 Gigabit port interface modules. These switches feature a robust design making them ideal for deployment in industrial applications and outdoor surveillance scenarios. capable of withstanding the harshest environment. The DGS-F3400 Series furthermore integrates advanced management and security functions to provide a complete solution.

Durable Design: The DGS-F3400 Series switches are housed in a highly resistant IP30-rated metal casing to protect the switches from harsh environmental conditions. The high electromagnetic compatibility (EMC) protects the DGS-F3400 Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of DGS-F3400 Series and make it capable to operate in a wider temperature range of up to 75 °C For increased flexibility.

Automation and IIoT ready

DGS-F3400 series switches are PROFINET certified and Ethernet/IP ready; which makes them best suited choice for backbone of Industrial automation networks. This Industrial switch helps monitor performance and status as a Modbus register and as an MQTT data point, allowing your PLC or control unit to access diagnostic data in real-time through Modbus TCP protocol. This distinguish feature help to provide crucial information to a Big-Data Analytics engine.

High Redundancy and Reliability

The DGS-F3400 Series support ERPS <50 ms quick failover recovery for ring topologies that ensures minimal downtime and avoids any loss of data in mission-critical deployment environments. Meanwhile, the dual power input allows redundant power supply to make sure the network continues to operate in the event of a primary power supply failure.

Advanced Features

The DGS-F3400 Series is equipped with advanced security features such as Static MAC, Storm Control, and IGMP Snooping. Static MAC allows users to create a MAC whitelist for specific ports, helping administrators limit network access to authorized devices only. Storm Control monitors broadcast, multicast, or unknown unicast traffic and will start blocking or discarding packets which could flood the network when the defined threshold is exceeded. IGMP Snooping can reduce the load of L3 multicast routers and save bandwidth in network throughput.

Easy Troubleshooting

The DGS-F3400 Series features loopback detection and cable diagnostics to help network administrators find and solve network problems quickly and easily. Loopback detection is used to detect loops created by a specific port and automatically shuts down the affected port. Cable diagnostics helps network administrators quickly examine the quality of the copper cables, recognize the cable type, and detect cable errors.

Power over Ethernet Support

The DGS-F3400 series switches are 802.3af PoE & 802.3 at PoE+ ready switches (PoE modules only) & can provide total PoE budget up to 720W, capable of supplying up to 30 W of power per port to connected PoE-enabled devices. This effectively reduces deployment times, reduces cable clutter, and eliminates the need for dedicated power supplies to allow PoE-devices to be installed in remote locations.

Technical Specifications		
Model Number	DGS-F3400SI	DGS-F3400XI
General		
Interfaces	4 x 1G SFP Ports, 3 Open Slots for 8 Gigabit Port Interface Modules.	4 x 10G SFP+ Ports, 3 Open Slots for 8 Gigabit Port Interface Modules.
Other Interfaces	1 x RS-232 Console Port (RJ-45) 2 relay outputs with current carrying capacity of 1A @ 24 VDC	
Media Interface Exchange	• Auto MDI/MDIX adjustment for all twisted-pair ports	
Other Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) • IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted- pair copper) • IEEE 802.3az compliance • Auto-negotiation • IEEE 802.3x Flow Control • IEEE 802.3z	
Duplex Mode	• Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps	
Performance		
Switching Capacity	56Gbps	128Gbps
MAC Address table	16K	
Transmission Method	• Store-and-forward	
Packet Buffer Size	1.5MB	
Physical / Environmental		
Diagnostic LED	PWR1, PWR2, Link / Status, PoE Power	
Weight	5Kg (Excluding Modules)	
Dimension (W x H x D)	440mm x 44mm x 340mm (Excluding rack mount Kit)	
Operating Temperature	-40°C~75°C (-4°F~158°F)	
Storage Temperature	-40°C~85°C (-40°F~185°F)	
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)	
Housing	IP30-rated metal casing	
Installation	19" Rack Mount	

Power Requirements	
Power Input	DC Models: 48~57 VDC Redundant AC Models: 110~220 VAC Redundant or Single PSU PoE Power: Dual 48~57 VDC (Each power input with Max. 360W)
Input Current	Switch Core AC/ redundant AC: 110-220 VAC, 0.58 A Max, 64W Max Switch Core redundant DC 48-57 VDC, 0.68A Max, 32.7W Max 802.3af PoE full loading: 45-57 VDC, 8.4A Max, 370W Max 802.3at PoE+ full loading: 51-57 VDC, 14.4A Max, 720W Max
Reverse Polarity Protection	Yes

Software Features	
Protocol Support	IPv4 / IPv6, IGMP v1/v2/v3, MLD v2, DHCP Client / Relay, GARP, GVRP, NTP, SNTP, IEEE1588 PTP v2, 802.1x, EAP, TACACS+, SMTP, SNMP v1/v2/v3, RMON, TFTP, ICMP, Telnet, Syslog, LLDP, LACP, Pingv6, IPv4 & IPv6 Dual Stack for Management
VLAN	802.1Q VLAN 4K VLAN Port Based VLAN Protocol based VLAN IP Subnet Based VLAN MAC Based VLAN
QoS	802.1P, CoS 8 Priority Queues Queue Handling: Strict, Weighted Round Robin, Deficit Weighted Round Robin.
Security	802.1x, Radius, TACACS+, Port Security, SSL/SSH Layer 2 & Layer 3 ACL
	Dynamic ARP inspection, IP Source Guard, STP root Guard, MAC based port Security
Standards/ Certifications/Compliance	
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4
EMS	IEC 61000-4-2 ESD IEC 61000-4-3 RS IEC 61000-4-4 EFT IEC 61000-4-5 Surge IEC 61000-4-6 CS IEC 61000-4-8 PFMF IEC 61000-4-11 DIP
Shock	MIL-STD-810G Method 516.5
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2
Freefall	MIL-STD-810F Method 516.5
Environmental	ROHS II

Optional Modules			
Part Code	DGS-F3X00-8T	DGS-F3X00-8P	DGS-F3X00-8S
Image			
Description	8 Port 10/100/1000 Base-T	8 Port 10/100/1000 Base-T PoE / PoE+	8 Port 1000 Base-X SFP
Interface	RJ-45	RJ-45	SFP Slot

Dimension	104.5 x 171.6 x 39.5mm	104.5 x 171.6 x 39.5mm	104.5 x 171.6 x 39.5mm
Weight	500 g	550 g	450 g

Ordering Information	
Part Code	Description
Switch Chassis	
DGS-F3400SI-AC	Layer 2 Gigabit Modular Switch with 4 1G SFP Ports & 3 open slots for 8 Gigabit Port Interface Modules. Single 110~220 VAC Power supply. -40° C to 75° C operating temperature.
DGS-F3400SI-ACAC	Layer 2 Gigabit Modular Switch with 4 1G SFP Ports & 3 open slots for 8 Gigabit Port Interface Modules. Dual Redundant 110~220 VAC Power supply. -40° C to 75° C operating temperature.
DGS-F3400SI-DCDC	Layer 2 Gigabit Modular Switch with 4 1G SFP Ports & 3 open slots for 8 Gigabit Port Interface Modules. Dual Redundant 48~57 VDC Power supply. -40° C to 75° C operating temperature.
DGS-F3400XI-AC	Layer 2 Gigabit Modular Switch with 4 10G SFP+ Ports & 3 open slots for 8 Gigabit Port Interface Modules. Single 110~220 VAC Power supply. -40° C to 75° C operating temperature.
DGS-F3400XI-ACAC	Layer 2 Gigabit Modular Switch with 4 10G SFP+ Ports & 3 open slots for 8 Gigabit Port Interface Modules. Dual Redundant 110~220 VAC Power supply. -40° C to 75° C operating temperature.
DGS-F3400XI-DCDC	Layer 2 Gigabit Modular Switch with 4 10G SFP+ Ports & 3 open slots for 8 Gigabit Port Interface Modules. Dual Redundant 48~57 VDC Power supply. -40° C to 75° C operating temperature.
Interface Modules	
DGS-F3X00-8T	8 10/100/1000 Base-T Ports Interface Module.
DGS-F3X00-8P	8 10/100/1000 Base-T PoE / PoE+ Ports Interface Module.
DGS-F3X00-8S	8 1000 Base-X SFP Ports Interface Module.
DGS-F3X00-4TM	4 10/100/1000 Base-T MACSec Interface Module.
DGS-F3X00-4TS	4 1000 Base-X SFP Ports MACSec Interface Module.

D-Link®
Building Networks for People